



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

Reply To
Attn Of: ECL-116

ACTION MEMORANDUM

DATE: January 5, 2000

SUBJECT: Request for a Removal Action, a Ceiling Increase, a \$2 Million Exemption, a 12-Month Exemption, and a Change of Scope at the CleanCare Site, Tacoma, Pierce County, Washington; Site ID #6W

FROM: Michael J. Szerlog
On-Scene Coordinator

TO: Michael F. Gearheard, Director
Office of Environmental Cleanup

THRU: Chris Field, Manager
Emergency Response and Site Cleanup Unit
Office of Environmental Cleanup

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval for a Continued Response (ceiling increase and change of scope) at the time critical Removal Action described herein for the CleanCare Site (CleanCare), Tacoma, Pierce County, Washington, and an Emergency Exemption to the Two Million Dollars and One Year Statutory Limits. The Continued Response and Statutory Limit exemptions is required for immediate reduction of the risk to the public and the environment from the uncontrolled hazardous substances at CleanCare.

II. SITE CONDITIONS AND BACKGROUND

The U.S. Environmental Protection Agency (EPA) identification number for the Site is: WAD 980738512. This is a time critical removal action.

**CLEANCARE SITE
ACTION MEMORANDUM**

1/3/2000 rev.

The CleanCare Corporation (CleanCare) Site, a former treatment, storage, disposal, and recycling (TSD) facility, is located at 1510 Taylor Way in Tacoma, Washington, 98421, at latitude 47° 16' 25" North and longitude 122° 23' 32" West in Township 21 North, Range 3 East, in Section 26. The site is approximately 5 acres in size and the nearest streets to the site are Taylor Way to the north, Alexander Avenue to the south, Lincoln Avenue to the east, and East 11th Street to the west. The site is located in the tide flats area of the Commencement Bay Superfund site between the Hylebos and Blair waterways (EPA Figure 1). The area was originally wetlands that were gradually filled in. Fill materials were first brought to the site in 1967 and allegedly included sludge from Occidental/Hooker Chemical Company, dredge spoils, lime wastes, and auto fluff (i.e., ground-up glass, plastic, foam rubber, wire, leather, rubber, cloth, vinyl, string and tires) (PTI 1989, SAIC 1990).

The CleanCare site was an interim status treatment, storage, disposal, and recycling (TSD) facility for off-site generated hazardous and non-hazardous wastes - one of a handful of commercial TSDs operating in the state of Washington. When the facility was in operation its major function was to solidify oily sludge wastes originating from catch basins, sumps, and storm drains; recycle waste oils, antifreeze, and spent solvents; and crush used oil filters for off-site recycling by other facilities. CleanCare also received hazardous and WDOE regulated dangerous waste. This waste was stored for transport to another TSD for final treatment and/or disposal, or was blended into hazardous waste fuel. Fuel wastes primarily consisted of paint wastes and other ignitable solvents and wastes that had fuel value. Solvent was received and recycled as part of a parts-washer program marketed to generators. CleanCare picked up the spent solvent and replaced it with recycled stock. CleanCare also received "paint gun wash," solvent that was generally of low quality, routinely used to clean paint spray guns. This waste was sent to Sol Pro, an adjacent but separate TSD/recycling facility, for recycling and then returned to customers. Additionally, CleanCare recycled antifreeze in a dedicated distillation column. A separate distillation column, called the "Splitter," along with other processing equipment, recovered oil from oily waste and prepared it for used oil fuel blending.

The CleanCare facility has four separate tank farms (tank farm (TF)-1, TF-2, TF-3, and TF-4), two hazardous/dangerous waste container storage pads (container storage (CS) CS-4A and CS 4-B), and a processing area where the distillation of solvent, oil, and antifreeze used to occur. Tank Farms: TF-1 contains three 100,000 gallon aboveground storage tanks (ASTs) (tank (T-3 through T-5) and one 400,000 gallon AST (T-1). TF-2 contained ten 20,000 gallon ASTs (T-6 through T-15). T-6 and T-7 were used to store exempt used oil; T-8, 9, 12, 13, 14, and 15 were used to store processed used oil until it was shipped to an off-site burner; and T-10 and 11 were used to store non-dangerous waste waters. TF-3 contained eight 20,000 gallon ASTs (T-18 through T-22). T-18, 20, and 22 were used to store exempt used oil until it was shipped to an off-site burner. T-19 and 23 were used to store processed antifreeze. T-21 and 24 were used to store non-regulated product diesel and product used oil. TF-4 contained

four 10,000 gallon ASTs (T-27 through T-29). T-26 was used to store waste antifreeze. T-27 and 28 was used to store waste fuels designated with waste codes D001, D004-D011, D018, D019, D021, D022, D035, D039, D040 and D043. T-29 was used to store waste solvent designated with waste codes D001, D035, F003, F005 and WT02. TF-5 (EPA nomenclature) located near the on-site wastewater treatment system contained two 10,000 gallon ASTs used to store wastewater. TF-6 (EPA nomenclature) located near the oily water processing system contained two 25,000 gallon ASTs used to store wastewater prior to discharge to the storm drainage system.

Container Storage: CS-4A and 4B contained dangerous waste designated with waste codes D001, D004-D011, D018, D019, D021, D022, D026, D027 through D029, D035, D038 through D040, D043, F001 through F005, K048 through K052, K086, K087, WT01, WT02, WP01, WP02, WP03.

Buildings: Building (B)-1 is located near the center of the site and contained the offices, the boiler, and an attached warehouse that stored product and facility records. On the second floor of the office building was housed a small laboratory used for waste profiling purposes. B-2 contained the wastewater treatment plant that was operating under City of Tacoma Permit # 004-756-258. Tanks T-WWT1 and T-WWT2 were used to store wastewater prior to discharge. The system (currently not operational) has connections plumbed to the City of Tacoma sanitary sewer. B-3 contained the maintenance shop which includes various containers of solvents, greases, and used oil. B-4 (small packaging building) contained some flammable and chlorinated solvents. This building is enclosed on three sides and has a concrete floor with a dead ended sump for spills. B-5 is a three-sided, roofed building (a.k.a the "Marine Building") that was used to store oil filters in drums, product chemicals used in antifreeze production, product antifreeze, miscellaneous non-dangerous waste containers, conditionally exempt small quantity generator waste containers, household hazardous waste containers, and various containers of unused product. B-6 contained the exempt antifreeze blending and packaging process. Distillation bottoms were periodically generated and transferred to the container storage areas.

Process Area: Both dangerous and non-dangerous wastes were recycled in the Process Area. The Process Area contained the Washex Distillation System which operated on a 24-hr basis. It was used to recycle solvents D001, D008, D018, D039, WT02, and non-dangerous wastes. T-16 was the Washex feed tank for dangerous waste solvent designated D001, D008, D018, D039, WT02. T-17 was used as the Washex receiving tank for product solvent. T-31 was the Washex feed tank for non-dangerous waste solvent. T-30 was the Washex receiving tank for product solvent. Adjacent to the processing area and TF-2 was the stabilization area used to stabilize sludge with wood chips and sawdust. The facility also has several loading and unloading areas where waste was off-loaded in bulk by tankers and in containers by both truck trailers and small, "package" trucks.

A storm water system was constructed when the facility was built in the mid to late 1980s. The system drain system leads to an oil/water separator at the south end of the site. At one time the oil/water separator contained a valve, which could switch between the sanitary sewer and the storm sewer. It is currently connected to the storm sewer, which outside of the facility, receives roof drainage from an adjacent building and parking lot runoff from the nearby site. The dedicated line then drains to the Lincoln Avenue Ditch and Blair Waterway- part of Puget Sound.

Ownership History

In 1926 the property (tax parcel #2052), owned by Arthur and Mattie Prichard, was sold to Kate Harrison. Harrison owned the property until 1941 when it was purchased by Aline Harrison Taylor. The Port of Tacoma filed a claim against the property in 1952 and later sold the property to Educators Manufacturing Company (EMC) in 1961. EMC granted an easement to the City of Tacoma in 1962. In February 1969, the site was purchased by Donald and Alba Oline who owned it until 1981. From 1969 to 1981, lime wastes, auto fluff, and sludge allegedly from the Occidental/Hooker Chemical Company were disposed of on the site (PTI 1989).

Poligen, Inc., a division of Lilyblad, leased the parcel in June 1974 and constructed a small tank farm on the property in 1975. Poligen began operating a chemical and petroleum recycling facility on the parcel in the late 1970s. The facility, known as the Poligen plant, was owned by Mr. Glenn Tegen, also owner of Lilyblad Petroleum, an oil re-refining facility located on the Port-of-Tacoma Road. The facility was designed by Mr. Tegen to expand his recycling operation from Lilyblad. The facility operated and at times supported the solvent recycling operation that was conducted at Lilyblad. The Solidus Corporation, which was formed by Mr. Tegen to be the owner of the land Poligen (now CleanCare) operated on, purchased the parcel in October 1981. In the late 1980's, Mr. Tegen changed Poligen's name to Northwest Processing. Northwest Processing merged into CleanCare in March of 1992. CleanCare was a separate company partially owned by Mr. Tegen, and formed to compete in the solvent parts washer business. The Northwest Processing site recycled solvent for CleanCare until they merged into one company under the name of CleanCare (PTI 1989, SAIC 1990).

As part of his personal Chapter 7 bankruptcy case, the Bankruptcy Court (after hearing both EPA's and Ecology's desire to have Mr. Tegen get out of CleanCare's business) directed Mr. Tegen to sell his share of CleanCare to TriWaste-Technisol in October of 1994. Ecology received notice by letter of transmittal dated October 21, 1994. Russell Bulman, President of CleanCare since the merger with Northwest Processing, remained in his position and continued to sign documents as the owner and operator of CleanCare. However, as of October 21, 1994, Mr. Tegen no longer had any official position with CleanCare. In addition, since the only asset of Solidus was the real property upon which CleanCare is located, after October 21, 1994, Solidus was a shell corporation with no assets.

Around 1995, the facility's easement road was moved from 1701 Alexander Ave to 1510 Taylor Way.

In August 27, 1997, the CleanCare site was purchased by Bromley Marr ECOS, Inc. (BME). BME's board of directors, at the time, consisted of Mr. Bruno, N. Kristensen, Mr. Don Steele, Mr. David E.G. Bromley, Mr. Dennis Spence, and Mr. James Marr. During that time, BME installed a sludge processing system in building 7 and a concrete pad adjacent to Pad #2.

On November 17, 1999, CleanCare announced that it could no longer conduct business and closed its doors. David Bromley, one of the current owners, has retained key employees to manage storm water collection and with maintaining site inventory.

Regulatory and Enforcement History

In a 1989 inspection by WDOE, Northwest Processing was found to be illegally storing waste in excess of ten days, among other violations of Washington Administrative Code (WAC) 173-303. On September 22, 1989, WDOE issued an order and penalty of \$114,000. At the same time, WDOE responded to the facility's 1988 permit application with a Notice of Deficiency (NOD) on June 29, 1990 (WDOE 1999c).

Mr. Tegen, owner of the facility at that time, submitted a revised Part B permit application on September 27, 1990. On October 8, 1990, Mr. Tegen submitted a Part A application to EPA for interim status due to the Federal Toxic Characteristic Rule. Northwest Processing claimed to be regulated because of their storage of waste antifreeze which failed the Toxic Characteristic Leaching Procedure for Benzene (D018) (WDOE 1999c).

The appeal process on WDOE order and \$114,000 penalty was completed by a decision issued from the Pollution Control Hearings Board (PCHB) on June 7, 1991. The PCHB's Final Findings of Fact, Conclusions of Law and Order affirmed most of the cited violations, denied Northwest Processing's claim of interim status at the time of the violations, and affirmed the penalty in full. An appeal of the decision to Superior Court was filed, but was dismissed after Ecology settled the matter and reduced the penalty to \$100,000. Ecology responded to the revised application with a second NOD and a warning letter on July 10, 1991 (WDOE 1999c).

Northwest Processing agreed to sign a RCRA 3008(h)-consent order for corrective action in exchange for a determination by EPA on their interim status Part A application for antifreeze. As a part of the negotiations between EPA, Ecology, and the three facilities located between Alexander Avenue and Taylor Way (Chemical Processors, Northwest Processing, and Sol Pro) a 3008(h) consent order was signed in January of 1992 for corrective action. The order laid out the beginning of the RCRA Facility Investigation process, putting the three companies on a coordinated schedule.

Responsibility for oversight of this order remains with Jack Boller of EPA Region 10, with current technical supervision by Ms. Kaia Petersen of Ecology. Responsibility for waste management compliance remained with Ecology (WDOE 1999c).

Northwest Processing finally gained interim status when EPA issued an order and penalty on February 12, 1992 accepting Northwest Processing's Part A application. A fine of \$28,865 for late application accompanied the order. EPA reduced and settled the original penalty to \$18,810 on July 18, 1994 (WDOE 1999c).

CleanCare submitted a revised Part B permit application on May 22, 1992. Ecology responded to this submittal with an administrative order and the third NOD on September 30, 1994 (WDOE 1999c).

CleanCare submitted a revised Part B permit application on June 15, 1995. This permit application requested a container storage capacity of 101,090 gallons (Container Storage Areas 4a and 4b and the Marine Warehouse) and tank storage capacity of 200,600 gallons (Tank Farms 3 and 4). This capacity reflected the management of antifreeze wastes and CleanCare's intent to solidify dangerous waste. Ecology responded to this revised application on February 6, 1997, with a fourth NOD (WDOE 1999c).

In January of 1997, Ecology issued a policy on waste antifreeze management. Waste antifreeze that was placed directly into a recycling process became *conditionally exempt* through amendment of Chapter 173-303 WAC in February of 1998. This rule change, along with the revision of Ecology's policy on review of dangerous waste permit applications, was reflected in the response to CleanCare with an offer to "expedite" their permit application. The conditional exemption of waste antifreeze management meant that CleanCare no longer had to count antifreeze as part of their storage capacity. A new NOD policy allowed only one more review cycle for this facility (WDOE 1999c).

CleanCare applied for federal interim status for antifreeze under a claim that it was newly regulated under the Federal TCLP designation process. EPA granted interim status to the facility in January of 1992, however, the "effective date" for considering the facility a TSD was cited as September 25, 1990, in WDOE's September 30, 1994, NOD order on the facility's Part B permit.

The Part B – Final Status Permit application was initially submitted in 1994 by CleanCare, however, Ecology was unable to process the application at that time due to manpower constraints. The facility has undergone changes in operations, some construction, and added new processes since the initial application. Part A applications have been re-submitted and requested by Ecology on numerous occasions. The currently approved Part A application was conditionally approved on October 28, 1998. The October 1998 Part A application is not current and an updated application has been requested as a result of recent EPA inspections (WDOE 1999c).

On March 26, 1999, CleanCare had an incident where approximately 1,000 to 2,000 gallons of oily wastes were allegedly spilled into the on-site storm drain system. The oil entered the Lincoln Avenue ditch and followed the storm drain to the Blair Waterway on Commencement Bay. On July 23, 1999, WDOE issued CleanCare a \$486,000 penalty and order for violations in storing and managing hazardous wastes and for the March 26th spills incident (WDOE 1999c).

During inspections between June 1998 and March 1999, WDOE found numerous violations, including: spills and discharges occurring without notification and cleanup; cross-contamination of storm water with oil and solvents; inadequate knowledge of incoming wastes; oil and dangerous waste stored in inappropriate tanks; substandard structures and sloppy housekeeping; and inadequate training for employees on emergency procedures and facility operations (WDOE 1999c).

Between July and August 1999, WDOE continued to enforce the order with CleanCare, however, at times granting extensions for sampling and disposal. CleanCare indicated that they were working with a potential buyer, Emerald Petroleum, Inc., which is a corporation founded by the same people who ran the Rabanco Disposal Companies. At this time, Emerald Petroleum is still interested in purchasing the property, and has indicated it wants to meet with EPA and the current owner in early January of next year. In August, CleanCare stopped receiving hazardous waste and waste water; however, it continued to accept oil, antifreeze, and solvents (WDOE 1999c).

In late August 1999, CleanCare alerted WDOE that they are planning to close their doors. WDOE issued an emergency order requiring that the site be secure and that a contact person/coordinator be named. In September 1999, CleanCare submitted a "mothball" plan to WDOE that met the requirements of the emergency order.

In October 1999, CleanCare started to lay off staff and began to dispose of some waste.

On November 1, 1999, WDOE, based upon information that CleanCare was closing its doors during the middle of November, requested assistance from EPA's Removal Program to address the need for removal action.

On November 17, 1999, CleanCare officially closed its doors. Ernst & Young LLP was appointed as receiver of Bromley-Marr ECOS Inc. Mr. Guy Levy of Ernst & Young LLP of Calgary was assigned to oversee the receivership of Bromley-Marr ECOS Inc.

A. Site Description

1. **Removal Site Evaluation**

The U.S. Environmental Protection Agency (EPA) tasked Ecology and

Environment Inc. Superfund Technical Assessment and Response Team (EPA START), under Technical Direction Document (TDD) 99-11-0005, to assess the risks associated with the CleanCare site. The EPA START observed site conditions and conducted sampling activities to determine the need for a removal action at the site.

Previous investigations at the site were conducted by WDOE and consisted of inspections and organized sampling events to collect analytical data to determine the contents of various waste streams accepted, generated, and stored at CleanCare. On March 8, 1999, WDOE conducted a sampling event at the facility. Liquid and solid samples were collected from tanks (T-1) in TF-1, from drums in CS-4A and CS-4B, and from a sump in CS-4A. Samples were analyzed for volatile organic compounds (EPA SW-846 method 8260), ignitability (EPA method 1010), total metals (EPA method 6010), polychlorinated biphenyls (PCBs) (EPA method 3585 and 8082). T-1 contained three separate phases, oil, water, and sludge. Samples of each phase were collected and submitted for analysis. Results from samples collected in the oil layer indicated the presence of volatile and semivolatile hydrocarbon constituents, benzene, lead, chromium, and chlorinated hydrocarbons. According to WDOE the oil would be designated as D001, D018, WP02, and WT01. Results from the water layer indicated the presence of hydrocarbon constituents, lead, and chlorinated hydrocarbons. According to WDOE the water would be designated as D001, WT02, D018, and WT01. The sludge layer indicated the presence of hydrocarbon constituents, arsenic, chromium, lead, benzene, and chlorinated hydrocarbons. According to WDOE the sludge would be designated as D001. According to WDOE, CS-4A was in poor condition, constructed of a low-density concrete with visible cracks and without the protection of a sealant. WDOE also reported that remnants of coating were visible in some areas. The sludge in the sump in this container storage pad was sampled to determine nature of an oil sheen on the water surface. CS-4B was built with high-density concrete, however, showed visible signs of cracking on and at the base of the ramp sloping down into the pad (WDOE 1999a).

On March 26, 1999, WDOE investigated and sampled the oil, water, and contaminated soils surrounding the release of approximately 1,000 to 2,000 gallons of oil into the storm drain system from the CleanCare facility. According to WDOE, the oil released was found to be designated as a dangerous waste for the constituent trichloroethylene. The oil was determined by WDOE's Manchester Laboratory to be a mixture of mineral spirits, lube oil, and motor oil. On September 16, 1999, EPA's On-Scene Coordinator (OSC) and EPA START visited the site with representatives

from WDOE, CleanCare, City of Tacoma Public Works, City of Tacoma Fire Department, and an attorney representing the Puyallup Tribe . During this visit the EPA START documented existing site conditions in log books and with a 35-mm camera. All storm drains were blocked off and storm water was accumulating on site. The facility did not have a spill control and countermeasures plan (SPCC). Soil sampling results indicated that all samples met the MTCA industrial cleanup levels for total petroleum hydrocarbons, benzene, toluene, ethylbenzene, xylene, and polyaromatic hydrocarbons. Sorbent booms were placed inside the ditch as a precaution (WDOE 1999b).

During November and December, 1999, EPA, along with assistance from EPA START, conducted a removal assessment and data collection.

The EPA START collected a total of 14 surface soil and 4 water samples from the site. Surface soil samples were collected from areas on site not covered by asphalt or concrete. These samples were collected at depths between 0 and 2 feet below ground surface (bgs). Water samples were collected from contact water located in secondary containment systems and non-contact water located in low lying areas on site (EPA Figure 2).

All samples were collected, handled, and analyzed, and results were reported, per the EPA START Sampling Plan/Quality Assurance Project Plan (QAPP). Surface soil samples were analyzed for Target Analyte List (TAL) Metals (EPA method 6000/7000 series), Volatile Organic Compounds (VOCs) (EPA method 8260), and semivolatiles (SVOCs) (EPA method 8270). One of the 14 soil samples was also analyzed for polychlorinated byphenyls (EPA method 8082). Water samples were analyzed for TAL Metals (EPA method 6000/7000 series), Dissolved Metals (EPA 6000/7000 series), VOCs (EPA method 8260), SVOCs (EPA method 8270), pH (EPA method 150.1), Total Organic Carbon (EPA method 9060), and Total Suspended Solids (EPA method 160.2) (EPA START 1999a).

Analytical results for surface soil samples (EPA Table 1), and for water samples (EPA Table 2) are attached. Water samples collected from TF-2, standing water on gravel west of TF-4, and standing water north of B-1 detected the presence of low levels of metal, semivolatiles, and volatile constituents. Results for non-contact storm water were below draft non-contact storm water discharge limits. Surface soil sample results indicated the presence of arsenic, BTEX constituents, and polyaromatic constituents at concentrations above EPA Region 9 risk based screening Preliminary Remediation Goals (PRGs) and WDOE's MTCA method A cleanup values.

2. **Physical Location**

The CleanCare site is located at 1510 Taylor Way in Pierce County, City of Tacoma, Washington at Township 21, Range 3 E. in Section 26. The site comprises approximately 4.2 acres latitude 47° 16' 25" North and longitude 122° 23' 32" West. The site is located in the "Tacoma Tideflats" area about three miles northeast of downtown Tacoma. The site is situated on a man-made peninsula, with Blair Waterway to the southwest, Hylebos Waterway to the northeast, and Commencement Bay to the northwest. The Puyallup River and Waterway drain into Commencement Bay about two miles to the west. The Tideflat area is quite low and flat, typically ranging up to 20 feet above mean sea level (MSL). The surrounding area is comprised of heavy industrial properties and is located within two miles of Interstate 5. The area to the west and east is Phillips (a TSD facility), to the east and southeast is Sol-Pro (a TSD facility), to the east is the Educator building (houses Northstar Trucking, Mapletex, and the offices of Sol-Pro), and to the north is a vacant lot currently offered for lease by ProLogis/Global Distribution Solution). Additionally, to the east is a storm water retention pond that the City of Tacoma installed. This water body is located approximately 100 feet from Building 5 (Marine Building).

3. **Site Characteristics**

On October 16 and November 1, 1999, EPA and EPA START visited the site and observed the following conditions at the former TSD facility.

TF-1 contained approximately **685,000 gallons** of waste halogenated solvent (RCRA characteristic ignitable waste) (based on sampling event previously conducted by WDOE) stored in four ASTs. There was visible evidence of a release of petroleum on surface water inside the earthen bottom of the secondary containment system. T-1 had petroleum stains on two sides of the tank showing recent evidence of spillage from seams near the roof line. T-1 also had developed a bulge at one of the tank's riveted seams indicating, according to ERRS subcontractor, Caliber, Inc., that the tank's foundation was shifting.

TF-2 contained approximately **136,340 gallons** of hazardous substances stored in ten 20,000-gallon ASTs. T-6, according to CleanCare, had contained PCB-contaminated oil, however, it has been decontaminated and is free of oil. The tank appeared empty and the man way cover was

not attached. Tanks T-7, T-12, T-13, T-14 contained 14,000, 15,728, 15,312, and 12,187 gallons respectively of “dry oil” (RCRA characteristic ignitable waste). Tank T-8 contained 17,772 gallons of emulsified oil and water. Tank T-9 contained 16,312 gallons of light ends from the splitter (RCRA characteristic ignitable waste). Tanks T-10, and T-11 contained 17,218, and 17,811 gallons respectively of wastewater/oil. Tank T-15 contained 10,000 gallons of water and oil removed from Lincoln Avenue Ditch and was associated with the March 1999 spill. In addition, there was evidence of petroleum floating on the surface of the water inside the concrete-lined secondary containment system.

TF-3 contained approximately **98,482 gallons** of hazardous substances stored in eight 20,000-gallon ASTs. Tanks T-18, T-20, T-22, T-23, and T-25 contained a total of 73,205 gallons (11,175, 11,718, 16,980, 18,620, and 14,712 gallons, respectively) of waste antifreeze (Miscellaneous WA State-regulated waste). Tank T-19 contained 3,581 gallons of waste antifreeze bottoms (Miscellaneous WA State-regulated waste). Tank T-21 contained 5,317 gallons of product diesel (Miscellaneous waste). Tank T-24 contained 16,379 gallons of wastewater.(Miscellaneous waste). There was evidence of antifreeze- and petroleum-like contaminated water located inside the concrete-lined secondary containment.

TF-4 contained approximately **29,150 gallons** of hazardous substances stored in four 10,000 gallon ASTs (T-26,T-27,T-28,T-29). Approximately 20,650 gallons are RCRA characteristic ignitable wastes and approximately 8,500 gallons are expected to be miscellaneous waste. T-26 contained approximately 8,150 gallons of “Waste Solvent” that was used for parts cleaning. CleanCare typically stored this waste solvent in T-26 prior to recycling. It is expected that this material will be treated as a RCRA characteristic ignitable waste. T-27 contained approximately 8,500 gallons of “Waste Lean Water”. This material is low BTU liquids (<9,000 BTU), primarily water/waste water with small quantities of solvent mixed in, and contact water from the secondary containment structure(s). T-28 contained approximately 6,950 gallons of “Waste Gun Wash”. Gun wash is solvent used in the painting industry to clean spray painting guns and equipment. The gun wash typically contained acetone, methyl ethyl ketone, toluene, and other constituents (RCRA Ignitable). T-29 contained approximately 5,550 gallons of “Waste A (alternative) Fuels”. Waste A Fuels are high BTU (>9,000 BTU) wastes such as solvents, break fluid, and contaminated oil that CleanCare was going to sell to as alternative fuel for use in oil burners. There was evidence of petroleum contamination on the surface of the water inside the concrete-lined secondary containment system.

TF-5 contained approximately **20,000 gallons** of wastewater stored in two

10,000-gallon above ground storage tanks. The tanks contained water that had been processed by the onsite wastewater treatment system. Both tanks (T-30 and T-31) were approximately full until the morning of 12/15/99 when it was noticed that the secondary containment was nearly full and the gauge for Tank T-31 indicated that it had only about 3 feet of water in it. Water was pumped from the secondary containment, and it was determined that the discharge valve for Tank T-31 was open. Currently, TF-5 contains approximately 10,000 gallons of treated wastewater (a non-regulated waste anticipated to be treated onsite and discharged). In a separate incident, on December 16, 1999, an unknown person pumped water into temporary storage tank number three causing the oil floating on the surface of the water to be released via the overflow vent. The oil flowed to standing water located on asphalt just east of TF-1.

TF-6 contained approximately **6,000 gallons** of hazardous substances stored in two ASTs. The 20,000 gallon tank contained approximately 3,000 gallons of water with a layer of oil. The 10,000 gallon tank contained approximately 3,000 gallons of uncharacterized waste. In addition, there was evidence of petroleum staining near the oily water separation system and around one of the ASTs.

Container Storage Pads 4A and 4B contained approximately **43,686 gallons** of waste in 916 containers, most of which are 55-gallon steel drums. A total of 10,892 gallons have been preliminarily identified as RCRA characteristic ignitable waste, 46 gallons have been preliminarily identified as RCRA characteristic corrosive waste, 2,848 gallons have been preliminarily identified as RCRA characteristic toxic waste, 8,489 gallons have been preliminarily identified as RCRA listed waste, 7,101 gallons have been preliminarily identified as miscellaneous waste, and 14,310 gallons are being considered unidentified miscellaneous waste.

B-1 contained approximately **6,048 gallons** of various unused products including solvents, soaps, and antifreeze..

B-2 contained two vats of petroleum-like contaminated water/sludge, carbon units, and several drums of unused wastewater treatment chemicals.

B-3 contained approximately **290 gallons** of oil products and 5 compressed gas cylinders.

B-4 did not contain any identified wastes or products

B-5 contained approximately **106,715 gallons** of hazardous substances located in 1,940 containers. The vast majority of containers in this area were observed to be 55 gallon drums. However, the actual sizes were not available for all of the containers in this area. The following information is

based on the assumption that all containers were full 55 gallon drums. 10,230 gallons have been preliminarily identified as RCRA characteristic ignitable waste, 3,855 gallons have been preliminarily identified as RCRA characteristic corrosive waste, 1,540 gallons have been preliminarily identified as RCRA characteristic toxic waste, 2,035 gallons have been preliminarily identified as RCRA listed waste, 63,145 gallons have been preliminarily identified as miscellaneous waste, 5,445 gallons have been preliminarily identified as miscellaneous Washington state regulated waste, and 20,465 gallons are being considered unidentified miscellaneous waste.

B-6 was not inventoried, however, there was evidence of an antifreeze spill located inside of B-6. The spill was contained to the concrete floor and the sump located inside.

The process area/stabilization area contained approximately **10,000 gallons** of liquid waste including 8,000 gallons of rain water (miscellaneous waste), 1,000 gallons of waste solvent sludge (miscellaneous unknown waste), and 1,000 gallons antifreeze bottoms (miscellaneous Washington state regulated waste). The process area also contained approximately **40 tons** of non-regulated sludge in 2 sludge bins and **10 tons** of non-regulated solid in 1 solidification bin. The roof drains showed signs of petroleum contamination possibly indicating that the roof covering the stabilization area is contaminated.

Adjacent to the stabilization area is a concrete pad used to contain a metal rolloff box used to stabilize sludge with wood chips. The concrete-lined containment area contained petroleum-like contamination that was overflowing onto nearby soils and into on-site standing water.

The 24 temporary rental tanks contained a total of approximately **440,000 gallons** including 370,000 gallons of contact and non-contact rainwater (miscellaneous waste anticipated to be treated and discharged on site), 15,000 gallons of antifreeze bottoms and 35,000 gallons of waste antifreeze (50,000 gallons of miscellaneous Washington state regulated waste), and 20,000 gallons of unknown miscellaneous waste. The process area showed signs of petroleum contamination on the concrete floor and on the piping systems.

There were numerous trailers on site that contained approximately **24,474 gallons** of liquids and a variety of non-regulated solid waste. The liquid waste includes approximately 12,920 gallons of RCRA characteristic ignitable waste, 165 gallons of RCRA listed waste, 385 gallons of miscellaneous waste, 6,435 gallons of miscellaneous Washington state regulated waste, and 4,569 gallons of unidentified miscellaneous waste. The non-regulated solid waste in the trailers includes approximately: 175

55-gallon drums of used oil filters, one trailer and one package truck of empty 55-gallon drums, one trailer and eight package trucks containing parts washers, and 14 55-gallon drums of sludge.

On-site soils contained the presence of metals, volatile organic compounds, and semi-volatile organic compounds at concentrations above WDOE's MTCA and EPA's PRG screening guidance. Additional sampling during the proposed removal action is warranted to determine the extent of soil contamination.

4. **Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant**

Sampling results and information from the site inventory indicate that there is approximately 1,600,000 gallons of waste on site stored in drums, tanks, sumps, piping, and other containers

a) **Hazardous Substances stored in on-site Tank Farms.**

Based on sampling results, site inventories, and on-site observations, there is approximately 1,407,000 gallons of hazardous substances exhibiting RCRA Ignitable and toxic characteristics stored in tanks located on site. Approximately 685,000 gallons of hazardous substances are stored in old deteriorating tanks (showing signs of releases and of weaknesses) located in TF-1.

b) **Hazardous Substances stored inside Drums and Containers located in on-site Buildings and Container Storage Pads.**

Based on sampling results, site inventories, and on-site observations, there is approximately 70,000 gallons of hazardous substances exhibiting RCRA Ignitable, toxic, corrosive characteristics, RCRA listed, and unused solvents and antifreeze stored in drums and containers located on site

c) **Hazardous Substances located in on-site soils, debris, and secondary containment systems.**

Based on historic sampling results, removal assessment sampling results, and on-site observations, there is approximately 800 cubic yards of soils on-site containing hazardous substances that meet Removal Action criteria (EPA START, see EPA Table 1). Guidance levels used for comparison were EPA Region 9

Preliminary Remediation Goals (PRGs) and regulatory levels used were Ecology's Model Toxic Control Act (MTCA), both for residential and industrial soils.

5. NPL Status

The CleanCare site property is located within the Commencement Bay Superfund Site and technically it was part of the original NPL listing package for Commencement Bay. However, CleanCare and the two other neighboring TSD facilities are also subject to RCRA closure and corrective action authority, and back in the early 1990's the Region and the facilities made a decision to address site contamination at the three TSDs using RCRA authority rather than CERCLA authority. At this time, EPA will be reviewing information to determine whether additional remedial work at the site is warranted under CERCLA after the time-critical removal action is completed.

6. Maps, Pictures, and other Graphic Representations

See attached EPA Figure 1 (site vicinity map), EPA Figure 2 (site map), and EPA Figure 3 (sample location map). In addition see attached EPA Table 1 (EPA soil sample results), EPA Table 2 (EPA water sample results), WDOE's December 3, 1999 letter formally requesting EPA's assistance.

B. Other Actions To Date

1. Previous Actions

There have been no government or private actions undertaken in the past. However, WDOE did oversee CleanCare's removal of oil contaminated water, soil, and sediment off site associated with the March 26, 1999 spill and release to the Blair Waterway. Apparently, some of the wastewater was stored at the CleanCare facility.

2. Current Actions

The following government actions are currently being conducted: On December 16, 1999, EPA issued Delivery Order 081-10-02 to Environmental Quality Management (EQM) under the Emergency and Rapid Response Services (ERRS) Contract to manage contact and non-contact storm water currently accumulating in on-site low lying areas and

in the numerous secondary containment areas. ERRS was also tasked with continuing the efforts that the START initiated to clean up the spilled oil released from the overflow pipe on a temporary wastewater storage tank. In addition, the ERRS was tasked to arrange for the disposal of three on-site temporary storage tanks currently holding contact storm water. There are no private actions currently being performed, however, CleanCare submitted notice letters to several clients providing them with information about the company's closure and how to reclaim wastes currently being stored on site. EPA START is coordinating site access for the clients to pick up their wastes for proper disposal at another TSD facility.

C. State and Local Authorities' Roles:

1. State and Local Actions to Date:

WDOE Jim Sachet and Kerry Graber requested EPA assistance at the CleanCare site and along with has been helpful in the investigation and planning for this removal action.

2. Potential for Continued State and Local Response:

At this time, the WDOE has deferred to the EPA for any emergency or time-critical actions required at this site. However, it is not known if WDOE will address, at a later time, any non time-critical issues at the site.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES:

Conditions presently exist at the site which may present an imminent and substantial endangerment to public health or welfare or the environment. Conditions at the site meet the criteria for a removal action as stated in the National Contingency Plan (NCP), 40 CFR, Section 300.415 as follows:

A. Threats to Public Health or Welfare

Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby human populations or the food chain. Over 1,600,000 gallons of hazardous substances and pollutants or contaminants (some incompatible) stored in aging drums, containers, deteriorating tanks, sludges, and debris largely at or near the surface and inside several buildings on site threaten nearby workers and trespassers by volatilizing, spilling onto on-site soils, or mixing to produce toxic or explosive vapors. Vandals have entered the site on two occasions causing hazardous substances to be released on site.

Actual or potential contamination of drinking water supplies. No drinking water supplies are located near the site.

Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of a release.

Approximately 1,600,000 gallons of hazardous substances and pollutants or contaminants (some incompatible) are on site currently being stored in aging drums, containers, deteriorating tanks, pipes, and sumps. Of the total volume of hazardous substances on site, approximately 1,407,000 gallons is stored in tanks, while 70,000 gallons is stored in drums or containers. Approximately 685,000 gallons of hazardous substances are stored in deteriorating tanks located inside TF-1. The containment system for TF-1 consists of an earthen floor surrounded by a concrete berm. There was evidence of leaks and releases to on-site soils.

High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate. Based on historic sampling information, removal assessment information, and on-site observations, there is approximately 800 cubic yards of soils contaminated with hazardous substances located at or near the surface. The potential for migration is high.

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released. All storm drains on site have been plugged resulting from continued violations of the facility's NPDES permit including a March 26, 1999 spill of approximately 1,000 to 2,000 gallons of oil and hazardous substances through the storm water system leading to the Blair Waterway - water body of Puget Sound. Because of this, storm water is accumulating on site inside of secondary containment systems and in large low-lying areas on site. The threat of off-site migration via surface water runoff is extremely high.

Threat of fire or explosion. Approximately 880,000 gallons of hazardous substances on site are characterized as RCRA Ignitable. These substances are stored in drums, tanks and containers located either outside on container storage pads or inside the three-sided Marine Building. The current state of the containers/tanks which hold ignitable or reactive wastes are such that if these containers/tanks are not immediately addressed, there remains a threat of fire or explosion. Several other TSD facilities are located in close proximity to the site and could be impacted if a fire or explosion occurred.

B. Threats to the Environment

The contamination at the Site creates an imminent and substantial endangerment to the environment in part through the actual or potential exposure of the Blair

Waterway to hazardous substances and pollutants or contaminants.

Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby animals or the food chain. Large volumes of uncontrolled and incompatible hazardous substances and pollutants or contaminants in drums, containers, tanks, secondary containment systems, and sumps threaten migratory birds if released to the environment through volatilization. If released, these substances, pollutants, and contaminants could reach surface water through the shallow aquifer or through overland migration potentially impacting threatened and endangered salmon.

Actual or potential contamination of sensitive ecosystems. The Commencement Bay and the Lower Puyallup River watershed provide habitat for a variety of invertebrates, mammals, birds (including the Bald Eagle), amphibians, reptiles, and fishes (including the chum, coho, pink, sockeye, and chinook salmon, steelhead, cutthroat trout, and bull trout (Shapiro and Associates 1992).

Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of a release. Approximately 1,600,000 gallons of hazardous substances and pollutants or contaminants (some incompatible) are on site currently being stored in aging drums, containers, deteriorating tanks, pipes, and sumps. Of the total volume of hazardous substances on site, approximately 1,407,000 gallons is stored in tanks, while 70,000 gallons is stored in drums or containers. The bulk of drum storage is located in B-5 which is located adjacent to the City of Tacoma's off-site storm water retention pond. Approximately 685,000 gallons of hazardous substances are stored in deteriorating tanks located inside TF-1. The containment system for TF-1 consists of an earthen floor surrounded by a concrete berm. There was evidence of leaks and releases to on-site soils and possibly groundwater.

High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate. Based on historic sampling information, removal assessment information, and on-site observations, there is approximately 800 cubic yards of soils contaminated with hazardous substances located at or near the surface. The potential for migration to surface water is high.

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released. Most of the chemicals on-site are located inside of tanks, containers, or drums however, containers located outside the building, may release contaminants causing them to potentially migrate

overland or to surface water via the shallow aquifer.

Threat of fire or explosion. The current state of the containers/tanks which hold ignitable or reactive wastes are such that if these containers/tanks are not immediately addressed, there remains a threat of fire or explosion. Native and migratory wildlife could be impacted by a fire or explosion.

IV. ENDANGERMENT DETERMINATION

Actual and threatened releases of hazardous substances, pollutants and contaminants from this site may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. EXEMPTIONS FROM STATUTORY LIMITS

Exemptions to the \$2,000,000 and one year statutory limits on removal actions specified in Section 104(c)(1) of CERCLA are needed for the immediate reduction of risk from the uncontrolled hazardous waste found at the CleanCare site. Over 1,500,000 gallons of hazardous substances are stored in tanks, drums, containers, pipes, and sumps on site. Approximately 685,000 gallons of the total hazardous substances located on site are stored in 1950's vintage riveted steel ASTs in TF-1. This TF has a concrete secondary containment system with an earthen bottom. The tanks located inside show signs of deterioration, shifting, and staining from past releases, attributed to overfilling and from the weight of rainwater on the roof of the filled tanks. The threat of a catastrophic release is high. Releases would impact the Blair and Hylebos Waterways through groundwater and overland migration. Groundwater is extremely shallow at this site, especially during this time of the year. The remaining volume of hazardous substances located on site are stored in tanks (inside TFs), and stored in drums, containers, and sumps located in buildings, process areas, or container storage pads. The threat of a fire, explosion, or release is high. Releases and fire/explosions, could reach surface water and impact local businesses including other TSD facilities. The threat of vandalism is extremely high on the site. There have been numerous incidents since August of 1999, including two incidents involving opening of on-site tank valves and illegally transferring waste water causing the release of hazardous substances. Increasing the site ceiling and changing the scope of removal is required to address the above mentioned threats not identified in the emergency action memorandum set forth to prevent the discharge of large volumes of contact and non-contact storm water accumulating inside of secondary containment systems and in low lying areas on site. The exemption of the one year statutory limit is required as the anticipated removal work required to prevent contamination reaching groundwater and the Blair and Hylebos Waterways (part of Puget Sound) will take approximately 1.5 years.

By signing this Action Memorandum, and pursuant to the authority contained in the October 5, 1998 Region 10 Regional Delegations numbered R10-14-2-A and R10-14-3,

the Director of the EPA Region 10 Office of Environmental Cleanup has determined that this site is eligible for the CERCLA emergency waiver and the CERCLA consistency waiver from the \$2 million and one year statutory limits on removal actions found in Section 104(c)(1) of CERCLA. The conditions at this site are such that continued removal response actions are expected to last more than one year and exceed \$ 2 million in cost. In addition, the Director of the Office of Environmental Cleanup has determined that the site conditions: 1) require an immediate response to prevent, limit, and/or mitigate an emergency; 2) present an immediate risk to public health or welfare or the environment; and 3) present a situation where assistance from other government agencies or responsible parties will not otherwise be provided on a timely basis. In addition, the Director of the Office of Environmental Cleanup has determined that all removal actions taken under this Action Memorandum will be otherwise appropriate and consistent with any remedial actions that might be taken at the site in the future.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

The objective of the actions outlined below is to achieve reductions in potential exposures to human health and the environment in the areas with the potentially most mobile and highest levels of contamination. These proposed actions are based on the information known to date regarding the conditions at the site. As additional information is gathered, further actions may be necessary.

1. Proposed Action Description

The following options were evaluated:

1. Construction of a permanent fence to restrict access to the site and the abandoned chemicals.
2. Development of a strong enforcement strategy to identify all potential responsible parties; On-site treatment and discharge of wastewater; Off-site reuse and recycling of products or chemicals that are not designated as wastes but nevertheless still pose a threat to human health and the environment; Excavation and off-site disposal of contaminated surface soils, with backfilling of excavated areas using clean fill; Dismantling, decontaminating, and off-site recycling of tanks inside of TF-1; Off-site disposal of chemicals stored in tanks, drums, sumps, and containers; Assessing extent of contamination and decontamination of secondary containment systems, process lines, storage pads, containment sumps, wastewater treatment plant, and boiler room if determined to be required; removal and off-site disposal of

contaminated debris; and installation of an asphalt cap for excavated areas and/or other areas, if EPA determines an asphalt cap is necessary to reduce or prevent off-site migration of contaminated surface water or ground water.

3. No action.

Alternative #2 was selected, as this was determined to be the most protective, while still being cost effective in addressing the threat of a release from the approximate 1.5 million gallons of waste on site. Alternative #1 and #3 do not meet the objectives of the NCP or CERCLA. Alternative #1 was not selected due to the potential of incompatible materials mixing, of trespassers vandalizing the site causing releases of large volumes of waste, of wastes leaking from deteriorating tanks and drums causing groundwater and surface water contamination, and the potential for fire and explosion impacting the local businesses and the nearby waterways of Commencement Bay. Alternative #3 was not selected as this did not address the threats to human health and the environment whatsoever, and left a hazardous situation in place.

2. **Contribution to Remedial Performance**

This is a time-critical removal action. The proposed Removal Actions would be compatible with future remedial actions, including the downward migration of contaminants by placing an asphalt cap on areas where soil was excavated or where determined to be necessary to prevent off-site migration.

3. **Description of Alternative Technologies**

Use of recycling and reuse were identified as alternative methods to reduce cost. A carbon adsorption wastewater treatment system will be installed at the site to treat the large volumes of contaminated wastewater.

4. **EE/CA**

This applies only to non-time critical responses. This is a time critical removal action.

5. **Applicable or Relevant and Appropriate Requirements (ARARs)**

The proposed removal action will attain or exceed all ARARs to the extent practicable. Two factors will be applied to determine whether the identification and attainment of ARARs is practicable: (1) the exigencies

of the situation; and (2) the scope of the removal action to be taken.

Federal ARARs

The following is a summary of federal ARARs identified to date that may be applicable to the proposed removal action:

Resource Conservation and Recovery Act, as amended (RCRA), 42 U.S.C. §§ 6901 *et seq.*, and its implementing regulations codified in Chapter 260 through 265, 268, and 270 of the Code of Federal Regulations (CFR), including but not limited to the following specific requirements identified at this time:

40 CFR §§ 262.20, 262.21, 262.22, 262.23, 262.30, 262.31, and 262.32, relating to hazardous waste manifesting and labeling requirements prior to transportation of hazardous waste containers off-site;

40 CFR §§ 263.20 and 263.21, relating to off-site transport of hazardous waste (handling and manifesting requirements);

40 CFR §§ 265.117(a)(1) and (c), 40 CFR § 265.310(a) and (b), relating to capping contaminated soils;

40 CFR §§ 265.171-265.178, relating to on-site pre-disposal handling and storage of hazardous waste in containers;

40 CFR §§ 265.191 and 265.192, relating to treatment of RCRA hazardous wastes in a tank;

40 CFR §§ 265.191(a-b), 265.192(c-e), 265.193(b-f), 265.194(a-c), 265.196 [excluding 265.196(d) and (f)], 265.197(a), 265.198, and 265.199, relating to requirements for hazardous waste storage tanks;

40 CFR § 265.273(a-e), relating to prevention of surface water run-on and collection and

control of surface water run-off at a land treatment unit;

40 CFR Part 268, relating to off-site and on-site land disposal restrictions for hazardous wastes;

40 CFR Part 279, relating to standards for management of used oil, including but not limited to 40 CFR §§ 279.21, 279.22, 279.24, 279.43, 279.44, 279.47, and 279.81; and

40 CFR § 300.440, relating to the CERCLA “Off-Site Rule.”

Federal Water Pollution Control Act (Clean Water Act), as amended (CWA), 33 U.S.C. §§ 1251 et seq., and its implementing regulations codified in Chapters 122, 125, 129 and 133 of the CFR, including but not limited to the following specific requirements identified at this time:

40 CFR § 122.44(a), relating to technology-based effluent limitations and standards;

40 CFR § 122.44(i), relating to monitoring requirements;

40 CFR Part 125, relating to use of best management practices when discharging effluent; and

40 CFR § 133.102, relating to secondary treatment.

Toxic Substances Control Act, as amended (TSCA), 15 U.S.C. § 2601 et seq., and its implementing regulations codified at 40 CFR Chapter 761:

40 CFR §§ 761.60(a)(3), 761.60(a)(4), 761.79(a), relating to decontamination of PCB containers to allow unregulated disposal of such containers;

40 CFR §§ 761.65(b-c), relating to storage of PCBs for eventual disposal; and

“PCB Spill Policy,” providing guidance regarding action levels for cleanup of recent

small volume spills, codified at 40 CFR
§ 761.120.

State ARARs

The following is a summary of state ARARs identified to date that may be applicable, or relevant and appropriate, to the proposed removal action:

Model Toxic Substances Control Act, as amended (MTCA), and its implementing regulations codified at Chapter 173-340 of the Washington Administrative Code (WAC) (determined to be relevant and appropriate). The relevant and appropriate requirements under MTCA identified to date include the following:

Chapter 173-340-745 WAC, relating to MTCA
soil cleanup standards for industrial sites.

Washington State Hazardous Waste Management Act (HWMA), and its implementing regulations codified at Chapter 173-303 of the WAC (determined to be applicable). Since the state of Washington has been authorized by EPA to implement the HWMA regulations in lieu of the federal RCRA regulations, the applicable RCRA regulations for this removal action shall be those EPA-authorized state regulations which are the counterparts to the federal RCRA regulations which were listed above. If no state regulatory counterpart exists under Chapter 173-303 WAC, then the federal RCRA regulations listed above shall apply.

6. Project Schedule

The selected removal action is estimated to require approximately six months time to complete on-site removal and eight months time to complete transportation and disposal. Removal may commence upon signature of this Action Memorandum.

B. Estimated Costs

	<u>Current Ceiling</u>	<u>Costs to Date</u>	<u>Proposed Ceiling</u>
1. Extramural			
ERRS	\$100,000	\$ 50,000	\$2,700,000
START	\$ 20,000	\$ 0	\$ 350,000
Subtotal extramural	\$120,000	\$ 50,000	\$3,050,000

15% contingency	\$ 15,000	\$ 7,500	\$ 457,500
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Subtotal of Extramural	\$135,000	\$ 57,500	\$3,507,500
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2. Intramural

EPA direct	\$ 10,000	\$ 5,000	\$ 150,000
EPA indirect	\$ 10,000	\$ 5,000	\$ 150,000
CG Strike Team	NA	NA	\$ 100,000

Subtotal Intramural	\$ 20,000	\$ 10,000	\$ 400,000
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Subtotal Extra/Intramural	\$155,000	\$ 67,500	\$3,907,500
10% Project contingency	\$ 15,000	\$ 6,750	\$ 390,750

Subtotal Estimated Project Ceiling	\$170,000	\$ 74,250	\$4,298,250
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<u>Total Estimated Project Ceiling (rounded)</u>	<u>\$ 4,300,000</u>
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IV. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delay or disapproval of the proposed action will allow the potential for fire and/or explosion to continue. Past incidences of vandalism could occur again, resulting in additional releases into the environment. Failure to act will increase/prolong the threats to human health and the environment described above.

VII. OUTSTANDING POLICY ISSUES

See Enforcement Addendum to this Action Memorandum.

VIII. ENFORCEMENT

See Enforcement Addendum to this Action Memorandum.

IX. RECOMMENDATION

Conditions at the site meet the NCP Section 300.415(b)(2) criteria for a removal and I recommend your approval of the proposed removal action. The total project ceiling if approved will be \$4,300,000. Approximately \$3,507,500 will be for Extramural cleanup contractor funding, all of which will be from the regional removal funds.

APPROVED

DISAPPROVED

Michael F. Gearheard, Director
Office of Environmental Cleanup

Michael F. Gearheard, Director
Office of Environmental Cleanup

Date:_____

Date:_____

CONCURRENCE				
SIGNATURE				
SURNAME	M.Szerlog	C. Field	M. Pirzadeh	D. Ingemansen
DATE				

REFERENCES

CleanCare, October 9, 1998, Dangerous Waste Part A Permit, and Cover Letter for the CleanCare site in Tacoma, Washington.

EPA START, Ecology and Environment, Inc. (E & E), November 29, 1999a, Quality Assurance Project Plan, prepared for the U.S. Environmental Protection Agency, Region 10, under the Superfund Technical Assessment and Response Team (START) Contract No. 68-W6-0008, Technical Directive Document (TDD) No. 99-11-0005.

_____, December, 1999b, Draft CleanCare Removal Assessment Report, prepared for the U.S. Environmental Protection Agency, Region 10, under the START Contract No. 68-W6-0008, TDD No. 99-11-0005.

PTI, December 1989, PTI Environmental Services, Chempro Tacoma Facility Potentially Liable Party Search, Washington Department of Ecology Solid and Hazardous Waste Program, Olympia, Washington.

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Shapiro and Associates, 1992, Assessment of Habitat Loss. In: Commencement Bay Cumulative Impact Study. Prepared for U.S. Army Corps of Engineers, Seattle District, Seattle, WA.

WDOE, May 17, 1999a, Washington Department Of Ecology's Inspection and sampling event conducted at the CleanCare site on March 8, 1999, Tacoma, Washington.

_____, August 4, 1999b, WDOE's inspection report after March 26, 1999 release at the CleanCare site, Tacoma, Washington.

_____, July 22, 1999c, WDOE's recommendation for enforcement document for the CleanCare site, Tacoma, Washington, RCRA ID # WAD980738512.